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A Genus and Species of Wingless Fly from South Africa (Diptera, Sphæroceridæ).

by

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With 1 Text-figure.

Mr. B. R. Stuckenberg recently obtained five specimens of a wingless fly in forest litter at Storms River Pass, East Cape Province, and has been good enough to send them to me for study. In the key to brachypterous and apterous Sphæroceridæ which I published in 1955 (' Rev. chil. Ent. ', **4** : 89) it runs to the genus *Mesaptilotus* Richards, 1938 of which two species have been described from Mt. Ruwenzori. It differs from that genus as follows : the ocelli are fully developed and are right at the back of the frons which is almost truncate behind; there is only one anterior, outwardly directed, superior orbital bristle ; scutellum with two long apical bristles and only minute basal ones ; no sternopleural bristle.

The present genus, like most of the apterous members of the family, has probably evolved from *Leptocera* Oliv. but it is impossible to say from which subgenus and for geographical reasons it is likely to have evolved independently from the Ruwenzori ones. I have at hand a large number of undescribed brachypterous and apterous Spærocerids collected by Messieurs P. Basilewsky and N. Leleup. These come from various points between Mt. Elgon and the Uluguru Mts. in S. Tanganyika. They were all obtained on relatively high ground and so far as my very preliminary studies have gone, do not resemble the South African species.

Scutelliseta n. gen.

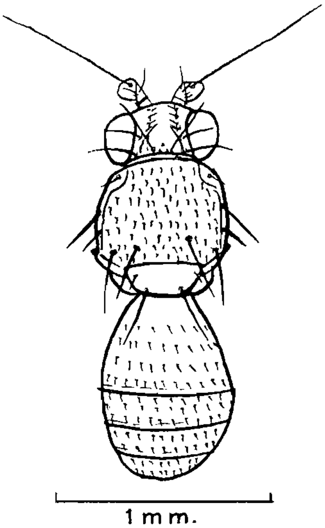
Wings and halteres absent. Eyes normal. Ocelli in a small broad-based triangle right at the back of frontal area which is almost truncate behind them. Four small interfrontal bristles, one ocellar, two superior orbitals, one external vertical, no inner vertical, postvertical or postoculars. Thorax posteriorly as wide as head with eyes, one minute humeral, one moderate notopleural, one small prealar, one long postalar, one long dorsocentral bristle about half-way between scutellum and suture. Scutellum almost twice as wide as long, with a minute basal hair on each side and a pair of long divergent apical bristles ; three minute hairs at top of sternopleuron. Mid-tibia with long dorsal bristles at $\frac{1}{4}$ and $\frac{4}{5}$, both surmounted by a very short antero-dorsal, latter also by a moderate postero-dorsal, and an apico-ventral, shorter in the male. Hind tibia with no spur. Abdomen egg-shaped, posteriorly rounded, twice as long as broad, hardly broader than thorax, margins sharp, deflexed ; sternites very broad, moderately sunk into the tergites ; first tergal plate (=I+II) regularly narrowed anteriorly, no part of abdomen with a raised border, all bristles short.

Type of genus *Scutelliseta coriacea* n. sp.

Scutelliseta coriacea n.sp.

♂♀.—Dull black, femora and tibiæ a little more shining. Antennæ yellow-brown. Fore tarsal segments 2–5 white. Mid and hind coxæ and trochanters dirty white, rest of mid and hind legs brownish. Length about 1·5 mm.

TEXT-FIGURE 1.



Dorsal view of *Scutelliseta coriacea* male. The scale line represents 1·0 mm.

Buccal and most of frontal triangle and of stripes between it and the orbits somewhat pale pollinose ; upper part of mesopleuron and fore coxæ distinctly pale pollinose, contrasting with the deep black sternopleuron. Mesoscutum very dull black, almost coriaceous, abdomen a little more shining. Mouth cavity large, mouthparts small, palpi rather reduced with a longish terminal bristle. Vibrissa half as long as width of frons, three or four small buccal hairs, none quarter as long as vibrissa ; buccæ at vibrissal angle about as wide as third antennal segment, nearly three times as wide posteriorly, oral margin slightly raised between the vibrissæ, occipital margin rather distinct though not actually sharp, occiput somewhat concave between the eyes ; eyes quite large, not emarginate, antero-ventral axis one-third longer than the other. Face vertical, with a rounded central keel but no knob. Antennæ divergent, second segment with four small bristles visible dorsally, arista long, at least four times as long as antenna, with short pubescence. Frontal triangle with sides moderately converging anteriorly, more than one and a half times as long as posteriorly wide. Mesoscutum finely coriaceous, in dorsal view about as long as broad, with about sixteen rows of microchætes of which four lie between the dorsocentrals, humeral calli very weak, scutellum well-separated from the scutum. Femora not thickened, fore femora with two stout posterior bristles before apex, mid-femur with a stout anterior bristle before apex. Fore tibia with a small oblique dorsal bristle at three-quarters. Fore tarsi a little widened. Mid-tarsus rather longer than the tibia, basitarsus long, more than half as long as tibia, with fine setæ beneath. Hind legs with no special modifications. Abdomen convex, first tergal plate (=I+II) comprising two-fifths its length, tergites 3 and 4 of about equal length, 5 about half as long as 3, first plate and tergite 3 with feeble apical impressions, tergites with numerous microchætes, on tergite 3 forming about three rows each of about 16–20 bristles ; sternites strongly developed, transverse, with short bristles. Male with tergite 6 visible on the left side, genitalia of moderate size, without long bristles, anus small, with a shining brown knob-like tubercle on the right side, forceps not visible, but some rather longer pale bristles arising near their base. Fifth sternite widely but rather shallowly emarginate, on the central quarter with a comb of stout outstanding black bristles, bristles at each end of comb considerably longer and those of centre very short. Female (only one immature specimen available) abdomen rather crumpled and cerci not visible, but microchætes a little longer than in male.

Type ♂, allotype ♀, 3 paratype ♂, S. Africa, E. Cape Province, Tzitzikama distr., Storms River Pass, *c.* 300 ft., in leaf litter from forest in ravine, 13.x.59 (*B. R. Stuckenberg*).

Type and allotype in the Natal Museum, Pietermaritzburg ; one paratype in my collection and one in that of the British Museum.

Mr. Stuckenberg tells me that the locality is in a very deep, narrow, steep-sided valley, not more than two miles from the sea.